

Notice of Allowability

Application No.

09/390,090

Examiner

Michael W. Hoyer

Applicant(s)

LEVESQUE ET AL.

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2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed on 8/12/05.
2. ☒ The allowed claim(s) is/are 1,2,4,5,7-11,14-16,18-25 and 27-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20050516.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 8/12/05 has been entered.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: Claims 1-2, 4-5, 7-11, 14-16, 18-25 and 27-29 are allowed. The allowed claims, originally numbered as 1-2, 24, 4-5, 7-8, 10, 9, 11, 25, 20, 21, 16, 28, 22, 14, 27, 23, 15, 18, 19, and 29, have been renumbered as claims 1-23, respectively.

As for independent claim 1 and similarly for independent claims 20-23 (renumbered as 12, 13, 16 and 19 respectively), the prior art, alone or in-combination, does not teach or fairly suggest a time-shifted video method comprising the steps of: a first buffering of an input signal having a digital video format; compressing said input signal in parallel with said first buffering, said compressing including a second buffering of said input signal; in a real-time mode, delivering a plurality of real-time video frames along a first processing path to an output for display in response to said input signal as first buffered; in a time-shifted mode, delivering a plurality of time-shifted video frames along a second processing path to said output for display in

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response to said input signal as compressed, said time-shifted video frames being delayed relative to said real-time video frames; and pausing at a particular one said real-time frames during a transition from said real-time mode to said time-shifted mode, wherein said time shifted mode comprises a fast forward or a fast rewind.

As for the most pertinent prior art of record, the O'Connor (USPN 6,480,667) reference teaches or discloses a method of time shifting to simultaneously record and play a data stream. The O'Connor reference discloses most of the claim limitations as described in the previous Office Action (mailed on 5/31/05). However, the O'Connor reference does not explicitly show that the input signal is buffered then compressed. The Yonemitsu et al (USPN 5,510,840) reference was provided to show that it is well known in the art to provide a frame buffer prior to a compression stage, as well as during and after compression. Yonemitsu et al specifically discloses this teaching as shown in Fig. 23, where buffering (buffer memory 18) occurs just prior to the compression stage (elements receiving the contents of buffer memory 18), as shown in Fig. 23, in order to properly perform the encoding or compression of the input video signal comprised of picture data of a picture (field or frame), which includes motion prediction and other processes (see col. 13, lines 18-47). Other buffers are shown in elements 7, 8 and 26. The claimed compressing including a second buffering of said input signal is also met by Yonemitsu which also discloses a second buffering as shown by transmission buffer memory 26. However, neither the O'Connor reference nor the Yonemitsu et al reference teach or suggest the claimed, "pausing at a particular one said real-time frames during a transition from said real-time mode to said time-shifted mode, wherein said time shifted mode comprises a fast forward or a fast rewind." It would not have been obvious to one of ordinary skill in the art to have paused at a

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particular on of said real-time frames during a transition from said real-time mode to said time-shifted mode, wherein said time shifted mode comprises a fast forward or a fast rewind. In the Applicants' invention the claimed limitation as described above is specifically disclosed in independent claim 1 and similarly for independent claims 20-23 (renumbered as 12, 13, 16 and 19 respectively).

In addition to, the Russo et al (USPN 5,701,383) reference discloses a method in which a memory is used for storing information relating to various points or frames in a program, so that at a specific point in a program when a "PAUSE command" (col. 3, lines 7-16 and col. 4, lines 15-27) is received, the system is automatically capable of commencing playback from that point or frame when a RESUME command is received beginning with the next frame or, in another embodiment, when a "MARK command" (col. 3, lines 46-49) is issued and used along with "Marker memory" (col. 8, line 20), where information regarding program markers is stored to specify a point or frame from which playback can be resumed beginning with the next frame. However, Russo et al does not teach or suggest the claimed, "pausing at a particular one said real-time frames during a transition from said real-time mode to said time-shifted mode, wherein said time shifted mode comprises a fast forward or a fast rewind." As described above, it would not have been obvious to one of ordinary skill in the art to have paused at a particular on of said real-time frames during a transition from said real-time mode to said time-shifted mode, wherein said time shifted mode comprises a fast forward or a fast rewind. In the Applicants' invention the claimed limitation as described above is specifically disclosed in independent claim 1 and similarly for independent claims 20-23 (renumbered as 12, 13, 16 and 19 respectively).

Finally, the Thomason et al (USPN 6,018,612) reference discloses an apparatus (Fig. 1) for time-shifting a real-time video stream. Thomason et al discloses several parts of the claim limitations as described in the previous Office Action (mailed on 5/31/05). However, Thomason et al does not teach or suggest the claimed, “pausing at a particular one said real-time frames during a transition from said real-time mode to said time-shifted mode, wherein said time shifted mode comprises a fast forward or a fast rewind.” As described above, it would not have been obvious to one of ordinary skill in the art to have paused at a particular one of said real-time frames during a transition from said real-time mode to said time-shifted mode, wherein said time shifted mode comprises a fast forward or a fast rewind. In the Applicants’ invention the claimed limitation as described above is specifically disclosed in independent claim 1 and similarly for independent claims 20-23 (renumbered as 12, 13, 16 and 19 respectively).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Crosby et al (USPN 5,933,192) – Discloses a multi-channel digital video transmission receiver with improved channel-changing response.

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Kim et al (USPN 6, 300,981) – Discloses an image data storage/display apparatus and method for a television receiver having a viewer's screen display function.

Ogura et al (USPN 5,311,317) – Discloses a video signal processing apparatus for displaying stored video signal during channel selection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is **571-272-7346**.

The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

United States Patent and Trademark Office
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401 Dulany Street
Alexandria, VA 22314

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Some correspondence may be submitted electronically. See the Office's Internet Web site <http://www.uspto.gov> for additional information.


Or faxed to: 571-273-8300

Hand-delivered responses should be brought to the Customer Service Window at the address listed above.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Michael W. Hoyer
October 28, 2005


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600